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# **USSR Report**

**HUMAN RESOURCES**

**No. 33**



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USSR REPORT  
HUMAN RESOURCES

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## LABOR

### 'TRUD' VIEWS MANPOWER ISSUES

Moscow TRUD in Russian 5 Jun 81 p 1

[Article by Doctor of Economic Sciences, Professor N. Klimov: "The Country's Working Hands"]

[Text] The first installments of this article discussed the technical conditions for achieving the socioeconomic targets of the new five-year plan. But as we know, productive capacities do not work by themselves. In the final analysis, everything is done by the country's labor resources, its people. As L. I. Brezhnev noted in his report to the 26th CPSU Congress, the manpower issue is not all that simple; it requires constant attention to improving demographic policy and to making sensible use of manpower.

Presently the overwhelming majority of the country's employable population is already employed in the social economy or is going to school. For practical purposes, sources of new manpower such as kolkhoz farmers for industry and construction, and people working for themselves and as hired hands, have been exhausted. Growth of the number of people of working age, meanwhile, computations show, will decrease from 18 percent in 1971-1980 to 3.8 percent in 1981-1990.

Such a demographic situation did not come about right away; it has its roots in long-term trends of industrial development, in growth of female employment connected with the former, in the consequences (the "echo") of wartime losses, change in life style, and so on. This is why for many years already, the party and state have been implementing an increasingly broader, integrated program to improve reproduction of manpower and to achieve its more-active use.

The issue of developing and successively implementing a long-range program to control development of the country's population, one which would also account for the regional features of our multinational state's development, is being raised. We know, after all, that in addition to labor-poor regions (the country's center, the Baltic republics, Siberia), our country has labor-rich regions (Central Asian and southern republics). To them, encouraging the employable population to participate in social production is not only an economic but also a sociopolitical problem, one having to do with the entire life style, with development of the socialist way of life.

in what concrete ways can we achieve more-effective use of manpower? We should mention, first of all, a patriotic initiative that is now enjoying broad acceptance in the country--attainment of targets with fewer numbers of workers. Experience in this effort has been accumulated by many production collectives, and mainly by the "Azot" Association, in which Shchekino chemists have now been working for 15 years on an economic experiment to raise labor productivity while reducing manpower.

Significant successes have been enjoyed in this direction in Sverdlovskaya Oblast, where in the 10th Five-Year Plan about 10,000 persons were freed in construction, about 1,400 were freed in machine building, and more than 600 were freed in timber and woodworking industry. These manpower reductions were achieved owing to combination of occupations, expansion of service zones, mechanization and automation of labor, and introduction of scientific organization of labor.

Discussing the immediate manpower reserves, we should once again turn our attention to the possibilities for homework by the elderly. I would like to begin with an example of organizing such work at the Kiev Fancy Haberdashery Factory. Out of the total employment of 4,100 persons, 3,172 are homeworkers, producing two-thirds of all products. Most of them live in neighboring cities and towns in Kiev and Chernigovskaya oblasts, where work pick-up and delivery stations have been organized, such that pensioners need not travel to the factory in Kiev. There are two factory representatives (a receptionist and a team leader) for every 200-250 homeworkers. The homeworkers' council (with one representative for every 30 workers) conducts perpetual organizational and occupational work with pensioners.

Given well organized homework, everyone wins. Pensioners lengthen the period of active productive and social life, and they receive the additional income they need. Enterprises broaden the production and assortment of consumer goods. In this case, experience has shown, the understandable production disadvantages associated with age are compensated by high professionalism and responsibility--that is, in the end, by high work quality.

Among the most diverse measures aimed at training and making the fullest possible use of personnel, significantly raising the responsibility of enterprises and associations for correct utilization of manpower provided to them by society has extremely important significance. The opinion has been suggested, for example, that we should gradually introduce payments for the manpower potential offered to an enterprise. The amount of the payments should reflect the society's total outlays on reproducing the work force. Material liability will force enterprises to hold onto personnel, to organize more-sensible use of personnel in accordance with their qualifications and experience, to increase production while concurrently economizing on manpower to the maximum, and to devote more attention to mechanization.

And finally, mention should be made of the qualitative aspects of the issue associated, as we know, with qualifications, with the level of general and special education of the labor resources. Within a short period of history we completed a truly enormous amount of work in this regard. Universal secondary education is now a success, and the number of people with a higher and secondary education was about 146 million at the end of 1980 (83 percent of the number employed in the national economy). Today in the Soviet Union there are 196 students for every 10,000 people, while in other countries the figures are 161 for France, 151 for Japan, 132 for Italy, 99 for the FRG, and 98 for England. In terms of the volume and level of personnel training, our VUZ's and tekhnikums have now fully satisfied the national economy's demand:

The former now offer courses in more than 430 specialties, and the latter offer courses in about 500.

Nevertheless the high rate of personnel training will persist in the 11th Five-Year Plan. Higher and secondary special educational institutions must graduate about 10 million persons. Further development of the network of vocational-technical schools--a highly important source for replenishing the national economy with skilled workers--has been foreseen. In 1981-1985, 13 million workers will graduate from these educational institutions.

11004

CSO: 1828/108



## LABOR

### LABOR PRODUCTIVITY, WORKING WOMEN DURING 11TH FIVE-YEAR PLAN

#### Labor Productivity

Moscow TRUD in Russian 1 Apr 81 p 1

[Article by Doctor of Economic Sciences Professor N. Klimov in the column "Panorama of the 11th Five-Year Plan; Issue No 3: Labor Productivity": "The Main Condition of Progress"]

[Text] During the 1980's the country should complete the changeover of the economy to the path of intensification and should implement new large-scale measures on the further increase of the efficiency of socialist production. The utmost increase of labor productivity was and remains the most important, prime condition of this.

Labor productivity is understood as a result, which, expressed as a quantity of output, is not taken absolutely but in correlation with labor expenditures. Here the best, optimal version is the one in case of which the overall labor-output ratio decreases, that is, not only living labor, but also equipment, raw materials and materials are saved. In other words, when evaluating the increase of the output of the workers at any specific works, it should be known without fail what this increase cost, what it cost other works, how it affected the end national economy results.

And, of course, it is necessary to compare the quantitative and qualitative aspects of the matter. At present we do not need every increase in productivity or every overfulfillment of the plan. What is the point of an increase of the output, if the output being produced is not in demand by consumers or is purchased by them unwillingly due to the lack of truly worthwhile, good quality goods? Such use of resources as grist for the mill has nothing in common with efficiency.

The increase of the productivity of social labor by 17-20 percent (in industry and agriculture this increase will be even greater), which is planned for the five-year plan, should provide not less than 85-90 percent of the increase of the national income. What are the main ways and means of fulfilling this assignment?

Scientific and technical progress, the further mechanization and automation of operations, as always, function as the most important means of increasing labor productivity. The combination of science with production and the influence on it of advanced ideas occur precisely through the equipment and processing method. For a new machine also requires the new, greater skills of the workers, the more

perfect organization of labor, greater conscientiousness and responsibility for the assigned job. When providing an increase of productivity, new technology at the same time promotes the improvement of the conditions of labor activity and the decrease of manual unskilled and difficult physical labor. For example, the increase of the level of mechanization of materials-handling, loading and unloading and warehousing operations, which is stipulated by the Main Directions, will make it possible to save here the labor of 1.5-2 million people.

The Increase of Labor Productivity in 1981-1985  
(percent)

In industry. . . . .	23-25
In agriculture . . . . .	22-24
National economy as a whole. . . . .	17-20
In construction. . . . .	15-17
In rail transport. . . . .	10-12

The scientifically sound norm setting and stimulation of labor, which are aimed at the increase of the dependence of wages on the end results of the work, the growth of labor productivity and the increase of product quality, are no less important. Incidentally, the shortcomings in this area very likely are especially significant. In recent times the lead of the growth of labor productivity as compared with the increase of wages has decreased noticeably. Thus, whereas during the Ninth Five-Year Plan each percent of the increase of productivity accounted for 0.66 percent of the increase of wages, in 4 years of the 10th Five-Year Plan it accounted for 0.81 percent.

At the 26th CPSU Congress the following words of L. I. Brezhnev received unanimous approval: "Our system of material and moral stimuli should always and everywhere ensure a just and objective evaluation of the labor contribution of each person. Conscientious workers must be encouraged in every possible way, loafers and bad workers must not be left loopholes for a good life while doing worthless work. Whoever wants to live better should work more and better." The assignments of the 11th Five-Year Plan provide for an entire system of measures on the achievement of this goal.

We often quote Lenin's statement that "the communist organization of national labor, toward which socialism is the first step, is supported by and, as progress is made, will be supported more by the free and conscious discipline of the workers themselves," while forgetting at times to add that V. I. Lenin at the same time emphasized in every way the protractedness and complexity of the process of the formation and development of the new labor discipline. "...For socialism," he said, "the main difficulty consists in ensuring labor discipline. The socialists wrote about this long ago... they understood that the real difficulties for the socialist revolution begin here."

The systematic and universal drive to increase labor discipline and the quality of all work is a condition of not only the increase of labor productivity, but also the development of the socialist way of life, the eradication of everything that hinders the formation of the new man. The labor collectives, the primary and main organizational units in the system of national labor, function as the main sphere of all this economic organizing and educational work.



The increase of the economic and political role of labor collectives, which was dictated by the entire course and prospects of the development of socialist society, has received constitutional ratification in our country. In Article 8 of the USSR Constitution it says: "The labor collectives participate in the discussion and settlement of state and public affairs, in the planning of production and social development, in the training and placement of personnel, in the discussion and solution of questions of the management of enterprises and institutions, the improvement of working and living conditions, the use of assets intended for the development of production, as well as for sociocultural measures and material incentives." The assignments of the new five-year plan are conducive to the more complete exercise of these constitutional rights, by increasing the material and organizational possibilities for this.

The opportunities of production collectives to organize highly productive labor on the basis of the launching of competition and the extensive dissemination of advanced methods of work, as experience shows, increase considerably with the change-over to the brigade form of the organization of labor, which should become the main form during the 11th Five-Year Plan.

The attribute of demandingness toward oneself and others, which was brought about by common interest and the awareness of the social significance of personal involvement in the implementation of national economic plans, is revealed more and more completely in the concerted work of the brigades which have converted to collective forms of the organization of labor and wages. N. A. Zlobin, the well-known leader of a brigade of construction workers, for example, says the following about his brigade: "For all of us it is the labor unit in which the formation of the personality of the citizen of our homeland, the master of his own fate takes place. You thoroughly realize precisely here that the success of the common cause depends on each of us." The fundamental attitude toward negligence, toward any instances of inconsistency and self-seeking arises and grows strong here. And it is not surprising that the monitoring and accounting, about which V. I. Lenin spoke as the most important task of socialism, are organized considerably more easily and effectively in a brigade which independently solves all the vital problems of the collective.

#### Working Women

Moscow TRUD in Russian 19 May 81 p 1

[Article by Doctor of Economic Sciences Professor N. Klimov in the column "Panorama of the 11th Five-Year Plan; Issue No 5: With Concern for the Working Woman": "In the Interests of the Family--For the Good of Society"]

[Text] Rereading the materials of the 26th CPSU Congress, you are convinced again and again of the invariability of the policy of the party and the state of further increasing the well-being of the people and of creating the best conditions for the strengthening and prosperity of each Soviet family--the most important unit of socialist society.

The successful implementation of the program of social development is of particular importance for woman. The increase of the standard of living and well-being creates good possibilities for the raising of the rising generation and the display of the best qualities of the working woman, the woman who is a mother.

During the 11th Five-Year Plan and in subsequent years a new system of measures on improving the life of women who are mothers and of the rising generation will be implemented. Regarding the assistance to families in raising children as an important direction of the social program of our society, the CPSU Central Committee and the USSR Council of Ministers adopted the decree "On Measures to Step Up State Assistance to Families Having Children."

It sets as a goal to ensure the efficient combination of the public and family raising of children, to make the situation of working mothers easier and to decrease the differences in the standard of living of families having children and childless families.

The problem of the material support of the woman who is a mother still remains serious. Often the lack of this support prevents the arrival of a child in the family. That is why starting this year partially paid leave for caring for a child until he reaches the age of one will be introduced by stages by regions of the country for working mothers. In the regions of the Far East and Siberia women will receive 50 rubles, while in the remaining regions they will receive 35 rubles a month. At the same time it will be possible to obtain additional leave without retention of pay, until the child reaches one and a half.

In those instances when the health of the child and the marital status nevertheless will not enable a woman to work, just as prior to an addition to the family, they are given preference in being transferred to an easier job and the right to work a partial work week or workday, according to the sliding (flexible) schedule, as well as to work at home.

Starting this year women having two or more children up to the age of 12 will be granted 3 additional days of paid leave and the right to use it during the summer or at another time convenient for them.

During this five-year plan the length of the paid time to care for a sick child will increase to 14 days, that is, by 7 days. The pay for additional days will come to 50 percent of the wage. In 1981 the state grant to single mothers will increase to 20 rubles a month and will be paid until the child reaches the age of 16, while the grants to students not receiving stipends and to school pupils, for example, will be paid until the age of 18.

The state is striving to encourage in every way the formation of families with many children. The mother will be paid 50 rubles upon birth of the first child and 100 rubles upon birth of the remaining children. It is envisaged in 1981 to establish additional preferences when granting a pension due to age in case of an incomplete period of service to women who have raised five or more children.

In all it is envisaged to allocate about 10 billion rubles from the state budget for implementing measures on the stepping up of state assistance to families with children. But this is only a small portion of the assets which the party and the state are allocating for the implementation of the comprehensive program of the improvement of the life of Soviet women.

In all sectors comprehensive plans of the improvement of working conditions, labor safety procedures and sanitary measures for the 11th Five-Year Plan have been

drafted and approved by the ministries, departments, committees and councils of the trade unions. The mechanization and automation of operations requiring the use of physical labor, the decrease of the influence of noise and vibration on the body and the control of dust have been incorporated in the plans. It is planned to remove more than 440,000 women from difficult physical, monotonous, unskilled jobs and 650,000 women from night shifts. Hundreds of thousands of women will be freed from works, occupations and jobs with adverse working conditions, will be taught new specialities and will be transferred to a job which corresponds to their physical capabilities.

A large portion of the measures aimed at improving the working conditions of women will be implemented owing to renovation, retooling, the extensive use of automatic manipulators, the modernization of equipment and industrial robots, the importance of which was rated highly by the party congress.

The number of seats in workers' dining rooms will be increased by several million, there will be twofold more plant polyclinics and health centers.

The health of a woman, her composure and her ability to participate on the same level as men in labor and social life in many ways depend on the health and well-being of her children. In 1981 15 million children are attending hundreds of thousands of kindergartens and nurseries. During the five-year plan preschool institutions accommodating another 2.5 million children will be put into operation.

If the gross income per family member does not exceed 60 rubles, the family will be exempted from paying for the care of children at nurseries, kindergartens and boarding schools.

The network of country Pioneer camps, camps for older school pupils and camps of the sanatorium type will be enlarged even more.

During this five-year plan the opportunities for the joint vacationing and treatment of parents with children will be broadened, the number of such sanatoriums and holiday hotels will increase 1.5-fold. By 1985, 168,000 new spots will be in operation.

Now 1.5 million women annually improve their health at plant sanatorium dispensaries. At times it is difficult for mothers needing treatment to get away from the home: there is no one to leave the children with. That is why in recent years on the initiative of the trade unions special "mother and child" shifts have begun to be organized at sanatorium dispensaries. While the mothers are at work, the youngsters remain under the care of medical personnel. This new form of sanatorium service, which has received the approval of the Health and Social Security Commissions of the USSR Supreme Soviet, will become even more widespread.

In the Main Directions provisions are made to take effective steps on facilitating labor in housekeeping. This is a very important issue, for many women work another "work shift" at home. It will be solved first of all by the development of personal services. In recent years for the convenience of people and first of all women receiving centers of laundries and dry cleaners, clothing repair and tailoring shops and barber and hairdresser shops have been opened at many enterprises and the sale of convenience foods has been organized.

During the years of the 11th Five-Year Plan the sales volume of personal services will increase by approximately 1.4- to 1.5-fold.

The concern about the woman who is a mother and about children, it was emphasized at the 26th CPSU Congress, in our country is truly a matter of state importance.

And this appeared clearly in the decisions of the party forum and in recent decrees of the party and the government. They are a reliable guarantee of the creation of all the conditions for the equal participation of women in labor and social life, of happy childhood and motherhood.

7807

CSU: 1828/101

## LABOR

### GEORGIAN EXPERT DISCUSSES ROLE OF LABOR PSYCHOLOGIST

Tbilisi KOMUNISTI in Georgian 1 Apr 81 p 4

[Article by Prof Dr of Psychology G. Kechkhuashvili, head of Tbilisi University's Labor and Engineering Psychology Kafedra, under rubric "Problem": "Psychologist in the Enterprise: Life Dictates, Science Substantiates"]

[Text] Experience has proved beyond a doubt that psychology greatly benefits the economy. Labor psychologists are needed in factories and plants, production associations, design bureaus, transportation, trade, communications, the printing trade, and in many other organizations. It has been estimated that following the advice of labor psychology specialists boosts an enterprise's economic effectiveness by 10 to 20 percent and reduces cadre turnover to five to ten percent.

Our republic's official organs are paying close attention to the practical adoption of advances in applied psychology, in particular labor and engineering psychology. But since the assignment of labor psychology specialists to enterprises and establishments in this republic is not handled centrally, the matter is left to the initiative of individual managers. The main obstacle to the centralized assignment of labor psychologists is the lack of a special labor and social psychologist staff (psychology service) and failure to define the psychologist's status in the table of personnel organization of the enterprises and establishments. Nevertheless, thanks to the personal initiative of some officials (for example, the Tbilisi Zaved Raykom and the Tbilisi State University Rectorate) labor psychologists are now being assigned to enterprises.

We are all witness to the fact that the means of labor are changing and becoming more complicated day by day (tools, machinery, and other equipment), but all too often, in such circumstances, we ignore the human being who is using these tools; we fail to take account of his psychological characteristics and capabilities. Current trends in industrial development indicate that in the near future the problem of designing equipment for the "man-machine" system will involve increasingly complicated matters of man's interaction with equipment. For this reason, the most important focus of the psychologist's work in the economy will be to "program" and "design" human actions as accurately as possible in automated and semiautomated systems. The psychologist will occupy a central place in the designing and operation of "man-machine" systems.



The production of mass consumer goods, from household appliances to printed matter and automobiles, is impossible without the participation of the labor psychologist. Serviceable efficient, and esthetically pleasing goods which at the same time can increasingly compete in international markets must, along with other requirements, take account of the consumer's psychological characteristics and peculiarities. For example, a household appliance must be designed and built so that it is simple and convenient for the housewife to use, and a child's toy must take account of the young customer's age characteristics as well as serve as a means of learning and indoctrination. In turn, printed matter--newspapers, journals, and various kinds of literature--must use the psychologically appropriate typeface and format for each particular case.

It is worthwhile, for example, to recall Candidate of Psychology H. Nasrashvili's research showing that when typefaces are designed on the basis of the correct scientific-psychological methods, reading errors are reduced and the time reading takes is shortened by 20 to 30 percent. Psychologists in West Germany have taken part in the creation of special typefaces which are easier to read when traveling, in conditions of vibration, and so on.

A no less important aspect of labor psychology is the choice of the psychologically appropriate people for each particular type of job. As is well known, one of the basic factors in personnel turnover, industrial accidents, and other negative phenomena in production is incompatibility between job and personality. Consequently, if industry is seriously interested in attracting and holding the right kind of personnel, reducing accidents, and boosting labor productivity, it cannot get by without the help of specialists in determining the psychological suitability of cadres. American scientists have estimated that psychological selection in the airline industry yields one million dollars in savings for every one hundred pilots, because this kind of selection substantially reduces the dropout rate due to professional unsuitability.

Obviously, a psychologist who joins an enterprise cannot change the labor safety office, but he can help a great deal. It has been demonstrated that 80 to 90 percent of all accidents are caused by psychological factors. Specialists believe that "accident proneness" in transport, mines, and other sectors is due to personality traits such as emotional instability, slow reaction time, fatigue, lack of self-confidence, and "adaptation" to hazardous conditions. The psychologists' real value, then, is that they can determine these personal characteristics and help the individual avoid jobs that are not suited to him.

The labor psychologist also has the job of taking part in determining optimal conditions of labor and rest and setting labor norms. On the basis of studying (by various techniques) the dynamics of man's functional states, in particular fatigue, and measuring its level, the psychologist can determine the factors that give rise to it and map out measures to prevent premature fatigue. Special mention should be made of the psychologist's effective help with regard to monotonous jobs. For example, measures that were carried out on the basis of a psychological study of assembly line work increased labor productivity by five percent and improved product quality by six to eight percent.

Among psychological factors which determine labor effectiveness, special mention should be made of existing interpersonal relations in the labor (enterprise) collectives, the organization and management of the labor collectives, and the shaping of positive motives and attitudes toward the work.

Among the first order of psychological matters is that of cadre turnover and stabilization of the labor collective, conditions resulting from the adoption of innovations in production, and so on, which must be studied and used as the basis for drawing up and adopting appropriate recommendations.

With regard to the role of the official, the psychologist examines his style of management, his attitudes, what he demands of his subordinates and how they perform, and then makes his own proposals and recommendations.

As to the problem of motivation, the labor psychologist looks into the workers' desires and complaints, what makes them happy and what dissatisfies them, and why. Analysis and generalization of the data thus obtained make it possible to deal with matters which ultimately serve to boost labor productivity and create a healthy psychological environment in the collective.

In addition, psychologists working in industry should take part in drawing up the outfit's social development plan. This is reflected primarily in taking account of subjective and objective factors which affect a person's labor (for example, professional training, experience, world view, moral attitude, material incentive, social involvement, and so on).

Thus, matters of increasing labor productivity and improving quality, improving professional training and shortening the time it takes, ensuring maximum labor safety, and properly shaping the personality are all largely dependent on the efforts of the enterprise's psychologist.

The question now arises: How well trained are our cadres to handle these tasks? Anyone who is acquainted with the state of our labor psychology training and job placement practices will readily agree that one of our biggest flaws is the discrepancy between the tasks of psychologist training and instruction plans and curricula. It is obvious, therefore, that for a while at least the newly employed enterprise psychologist will require skilled advice and help. It would be a good thing to take account of the experience accumulated in our country and the other socialist states and set up departmental (sector) consultation-coordination centers for our industrial psychologists. Such centers would supervise the work of the psychologists of the individual departmental enterprises, provide advice, and generalize experience .... But until such centers are established, and as long as the number of labor psychologists working in industry is small, it is preferable for their work to be supervised by qualified specialists from the university, the GSSR Academy of Sciences D. Uznadze Psychology Institute, and other psychology institutions. It should be noted that Tbilisi University's Labor and Engineering Psychology Kafedra already has significant experience in this regard.

As we know, the practical activities of today's highly-qualified specialist are becoming increasingly similar to scientific research. This style of work is especially characteristic of the labor psychologist. In most cases, an industrial labor psychologist submits to the enterprise recommendations drawn up and tested on the basis of research carried out by various scientific techniques. For this reason, his work also requires adequate laboratory equipment such as psychological testing equipment and other materials. It is clear, therefore, that the larger enterprises at least ought to set up small specialized psychology laboratories, and the best ones among them should be converted into practical training bases for students majoring in labor psychology.

Despite the generally acknowledged achievements and capabilities of labor and engineering psychology, it has yet to occupy its proper place in the economic life of our society. To quote USSR Academy of Sciences Corresponding Member B. Lomov, president of the USSR Psychology Society, "The practical activities of psychologists are not yet systematic; so far they are only random in character. Clearly, the final and crucial decision here lies with those authorities [instantsil] responsible for determining the legal basis for relations between psychologists and production enterprises, psychologists and the schools, clinics, and so on and institutionalizing [uzakoniye] the psychology service on the state level. Beyond a doubt, this kind of specially organized psychological service alone can achieve a significant breakthrough at the present stage.

6854

CSO: 1813/069

# LABOR

## LABOR STATISTICS FOR 1970, 1979

Moscow VESENIK STATISTIKI in Russian No 5, May 81 p 63

Text Numbers of the population of the USSR and Union Republics Engaged in Physical and Mental Labor in 1970 and 1979\*

Including those employed primarily in:

		All employees	Physical Labor	Mental Labor
USSR				
1970	.	115204076	84457121	30746955
1979	.	134859651	95061638	39798013
RSFSR				
1970	.	64818232	46479313	18338919
1979	.	74246723	51071166	23175557
Ukrainian SSR				
1970	.	23270653	17729666	5540987
1979	.	25838840	18794950	7043890
Belorussian SSR				
1970	.	4299658	3288755	1010903
1979	.	4981753	3594138	1387615
Uzbek SSR				
1970	.	4238002	3251853	986149
1979	.	6201077	4670608	1530469
Kazakh SSR				
1970	.	5492078	3990258	1501820
1979	.	6892349	4816054	2076295
Georgian SSR				
1970	.	2101734	1487093	614641
1979	.	2519204	1746799	772405
Azerbaijan SSR				
1970	.	1774737	1281152	493585
1979	.	2634876	1942904	691972
Lithuanian SSR				
1970	.	1531249	1154312	376937
1979	.	1749467	1232614	516853

## Continuation

Moldavian SSR					
1970	.	.	1788606	1472323	316283
1979	.	.	2059854	1593034	466820
Latvian SSR					
1970	.	.	1258382	888608	369774
1979	.	.	1371608	927381	444227
Kirghiz SSR					
1970	.	.	1123774	853464	270310
1979	.	.	1493181	1107588	385593
Tajik SSR					
1970	.	.	1003906	785129	218777
1979	.	.	1493174	1168365	324809
Armenian SSR					
1970	.	.	980140	694227	285913
1979	.	.	1440807	1000327	440480
Turkmen SSR					
1970	.	.	800529	598984	201545
1979	.	.	1138378	862727	275651
Estonian SSR					
1970	.	.	722396	501984	220412
1979	.	.	798360	532983	265377



## Continuation

In percentages of total  
number of employees

			Employed primarily in physical labor	Employed primarily in mental labor
USSR				
1970	.	.	73.3	26.7
1979	.	.	70.5	29.5
RSFSR				
1970	.	.	71.7	28.3
1979	.	.	68.8	31.2
Ukrainian SSR				
1970	.	.	76.2	23.8
1979	.	.	72.7	27.3
Belorussian SSR				
1970	.	.	76.5	23.5
1979	.	.	72.1	27.9
Uzbek SSR				
1970	.	.	76.7	23.3
1979	.	.	75.3	24.7
Kazakh SSR				
1970	.	.	72.7	27.3
1979	.	.	69.9	30.1
Georgian SSR				
1970	.	.	70.8	29.2
1979	.	.	69.3	30.7
Azerbaijan SSR				
1970	.	.	72.2	27.8
1979	.	.	73.7	26.3
Lithuanian SSR				
1970	.	.	75.4	24.6
1979	.	.	70.5	29.5
Moldavian SSR				
1970	.	.	82.3	17.7
1979	.	.	77.3	22.7
Latvian SSR				
1970	.	.	70.6	29.4
1979	.	.	67.6	32.4

## Continuation

Kirghis SSR					
1970	.	.	.	75.9	24.1
1979	.	.	.	74.2	25.8
Tajik SSR					
1970	.	.	.	78.2	21.8
1979	.	.	.	78.2	21.8
Armenian SSR					
1970	.	.	.	70.8	29.2
1979	.	.	.	69.4	30.6
Turkmen SSR					
1970	.	.	.	74.8	25.2
1979	.	.	.	75.8	24.2
Moldavian SSR					
1970	.	.	.	69.5	30.5
1979	.	.	.	66.8	33.2

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\* Continuation of census results published in the journal VESTNIK STATISTIKI (for earlier data see Nos. 2, 6--12 for 1980 and Nos. 1, 2, 4 for 1981).

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2384

GSO: 1828/103

# EDUCATION

## EDUCATIONAL LEVEL OF WORKERS IN VARIOUS ECONOMIC SECTORS COMPARED

MOSCOW VESTNIK STATISTIKI in Russian No 4, Apr 81 pp 69-79

[Text] Level of Education Achieved by Population Employed in Various Sectors of the National Economy, throughout the USSR and for the Union Republics\*

		Education Possessed per 1000 Employees			
		Higher	Incomplete Secondary Higher and General Secondary Specialized	Incomplete Secondary	
USSR					
All sectors of the national economy (except private subsidiary farms)	100	167	276	262	
Sectors of material production . . . . .	52	139	294	295	
Industry . . . . .	65	161	331	282	
Agriculture . . . . .	22	69	228	309	
Lumbering and woodworking . . . . .	48	125	179	304	
Transport . . . . .	41	152	313	326	
Communications . . . . .	41	183	376	280	
Construction . . . . .	86	162	298	303	
Trade and public catering . . . . .	43	207	320	275	
Material-technical supply and marketing . . . . .	82	204	270	278	
Procurement . . . . .	37	148	238	300	
Non-production sectors . . . . .	259	260	217	152	
Housing and communal services . . . . .	35	144	293	300	
Health care, physical education, and social security . . . . .	167	373	159	159	
Public education . . . . .	360	252	171	120	
Culture and art . . . . .	165	299	273	155	
Science and scientific service . . . . .	388	207	203	128	
Credit and state insurance . . . . .	93	356	334	163	
Management . . . . .	276	258	282	121	
Public organizations . . . . .	344	206	238	125	

# REFUR

All sectors of the national economy (except private subsidiary farms)	101	176	243	283
Sectors of material production	54	147	257	320
Industry	64	160	296	306
Agriculture	25	77	153	337
Lumbering and woodworking	47	132	150	320
Transport	39	152	270	356
Communications	39	179	338	315
Construction	86	167	264	326
Trade and public catering	37	194	282	315
Material-technical supply and marketing	76	205	241	301
Procurement	32	144	187	329
Non-production sectors	251	267	198	167
Housing and communal services	31	142	253	328
Health care, physical education, and social security	169	382	132	167
Public education	328	272	158	137
Culture and art	161	305	238	177
Science and scientific service	389	217	193	131
Credit and state insurance	84	350	307	200
Management	276	259	260	137
Public organizations	342	219	217	131

\* Continuation of census results published in the journal VESTNIK STATISTIKI  
(For the beginning see No 2, 6--12 for 1980 and No 1, 2 for 1981).

# Education Possessed per 1000 Employees

Higher	Incomplete Higher and Secondary Specialized	Secondary General	Incomplete Secondary
--------	--	----------------------	-------------------------

## Ukrainian SSR

All sectors of the national economy  
(except for private subsidiary  
firms).....

96	164	312	241
----	-----	-----	-----

### Sectors of material production

53	139	328	269
----	-----	-----	-----

Industry.....

71	165	393	240
----	-----	-----	-----

Agriculture.....

19	66	207	322
----	----	-----	-----

Lumbering and woodworking.....

46	109	222	300
----	-----	-----	-----

Transport.....

46	158	389	274
----	-----	-----	-----

Communications.....

43	188	450	224
----	-----	-----	-----

Construction.....

92	160	352	267
----	-----	-----	-----

Trade and public catering.....

51	239	374	220
----	-----	-----	-----

Material-technical supply  
and marketing.....

90	216	332	231
----	-----	-----	-----

Procurement.....

35	155	286	285
----	-----	-----	-----

### Non-production sectors.....

254	256	251	139
-----	-----	-----	-----

Housing and communal services....

39	152	354	264
----	-----	-----	-----

Health care, physical education,  
and social security.....

160	355	190	166
-----	-----	-----	-----

Public education.....

378	234	193	110
-----	-----	-----	-----

Culture and art.....

148	318	311	130
-----	-----	-----	-----

Science and scientific service...

415	189	220	107
-----	-----	-----	-----

Credit and state insurance.....

102	371	397	94
-----	-----	-----	----

Management.....

252	260	331	98
-----	-----	-----	----

Public organizations.....

342	198	273	112
-----	-----	-----	-----



# Education Possessed per 1000 Employees

	Higher	Incomplete Higher and Secondary Specialized	Secondary General	Incomplete Secondary
Belorussian SSR				
All sectors of the national economy (except for private subsidiary farms).....	95	161	284	223
Sectors of material production	49	132	301	249
Industry.....	63	154	405	232
Agriculture.....	23	71	150	253
Lumbering and woodworking.....	54	120	138	263
Transport.....	36	137	360	296
Communications.....	35	189	399	259
Construction.....	83	161	312	287
Trade and public catering.....	44	220	383	214
Material-technical supply and marketing.....	86	204	314	237
Procurement.....	43	188	223	253
Non-production sectors.....	273	271	221	124
Housing and communal services....	39	163	320	260
Health care, physical education, and social security.....	161	386	145	143
Public education.....	396	245	152	101
Culture and art.....	151	321	291	135
Science and scientific service...	429	193	206	98
Credit and state insurance.....	98	385	381	100
Management.....	271	272	319	87
Public organizations.....	410	202	226	86

# Education Possessed per 1000 Employees

Higher	Incomplete Higher and Secondary Specialized	Secondary General	Incomplete Secondary
--------	--	----------------------	-------------------------

## Uzbek SSR

All sectors of the national economy  
(except for private subsidiary  
farms).....

96	133	413	206
----	-----	-----	-----

Sectors of material production

40	104	455	232
----	-----	-----	-----

Industry.....

61	153	431	226
----	-----	-----	-----

Agriculture.....

15	50	473	245
----	----	-----	-----

Lumbering and woodworking.....

51	92	389	242
----	----	-----	-----

Transport.....

44	148	457	235
----	-----	-----	-----

Communications.....

58	199	457	200
----	-----	-----	-----

Construction.....

84	155	436	221
----	-----	-----	-----

Trade and public catering.....

61	209	439	175
----	-----	-----	-----

Material-technical supply

--	--	--	--

and marketing.....

116	192	369	201
-----	-----	-----	-----

Procurement.....

60	152	407	192
----	-----	-----	-----

Non-production sectors.....

304	238	261	111
-----	-----	-----	-----

Housing and communal services....

47	143	418	223
----	-----	-----	-----

Health care, physical education,

--	--	--	--

and social security.....

169	370	232	123
-----	-----	-----	-----

Public education.....

444	204	203	81
-----	-----	-----	----

Culture and art.....

206	227	379	113
-----	-----	-----	-----

Science and scientific service...

348	196	260	127
-----	-----	-----	-----

Credit and state insurance.....

127	334	391	93
-----	-----	-----	----

Management.....

293	238	317	93
-----	-----	-----	----

Public organizations.....

349	160	279	119
-----	-----	-----	-----

Education Possessed per 1000 Employees

	Higher	Incomplete Higher and Secondary Specialized	Secondary General	Incomplete Secondary
Kazakh SSR				
All sectors of the national economy (except for private subsidiary farms).....	93	165	289	260
Sectors of material production	44	133	308	297
Industry.....	56	159	331	286
Agriculture.....	26	78	285	297
Lumbering and woodworking.....	46	136	195	298
Transport.....	33	136	313	334
Communications.....	34	166	422	262
Construction.....	74	159	295	312
Trade and public catering.....	39	198	328	270
Material-technical supply and marketing.....	71	190	267	284
Procurement.....	29	132	253	300
Non-production sectors.....	233	259	235	154
Housing and communal services....	28	133	283	300
Health care, physical education, and social security.....	146	365	178	162
Public education.....	320	240	210	127
Culture and art.....	133	276	321	155
Science and scientific service...	258	201	225	186
Credit and state insurance.....	80	369	334	151
Management.....	295	273	282	101
Public organizations.....	321	201	234	147

# Education Possessed per 1000 Employees

Higher	Incomplete Higher and Secondary Specialized	Secondary General	Incomplete Secondary
--------	--	----------------------	-------------------------

## Georgian SSR

All sectors of the national economy  
(except for private subsidiary  
farms).....

150	156	380	170
-----	-----	-----	-----

Sectors of material production

72	131	421	203
----	-----	-----	-----

Industry.....

105	155	496	154
-----	-----	-----	-----

Agriculture.....

26	84	363	256
----	----	-----	-----

Lumbering and woodworking.....

106	149	334	221
-----	-----	-----	-----

Transport.....

71	158	485	188
----	-----	-----	-----

Communications.....

74	216	486	143
----	-----	-----	-----

Construction.....

154	147	420	179
-----	-----	-----	-----

Trade and public catering.....

102	257	435	125
-----	-----	-----	-----

Material-technical supply

155	182	420	139
-----	-----	-----	-----

and marketing.....

Procurement.....

152	211	374	145
-----	-----	-----	-----

Non-production sectors.....

351	224	275	83
-----	-----	-----	----

Housing and communal services....

81	154	451	177
----	-----	-----	-----

Health care, physical education,

202	341	272	101
-----	-----	-----	-----

and social security.....

Public education.....

534	192	175	49
-----	-----	-----	----

Culture and art.....

287	245	353	64
-----	-----	-----	----

Science and scientific service...

505	135	241	68
-----	-----	-----	----

Credit and state insurance.....

201	395	342	37
-----	-----	-----	----

Management.....

348	219	318	71
-----	-----	-----	----

Public organisations.....

319	151	351	101
-----	-----	-----	-----

# Education Possessed per 1000 Employees

	Higher	Incomplete Higher and Secondary Specialized	Secondary General	Incomplete Secondary
Azerbaijan SSR				
All sectors of the national economy (except for private subsidiary farms).....	106	142	360	224
Sectors of material production	47	110	395	258
Industry.....	76	152	426	226
Agriculture.....	15	57	354	299
Lumbering and woodworking.....	49	130	320	252
Transport.....	57	156	427	241
Communications.....	53	211	449	200
Construction.....	73	125	465	229
Trade and public catering.....	82	210	404	184
Material-technical supply and marketing.....	104	174	369	219
Procurement.....	65	153	410	206
Non-production sectors.....	290	241	252	118
Housing and communal services....	38	117	408	243
Health care, physical education, and social security.....	181	374	200	125
Public education.....	441	240	161	78
Culture and art.....	164	249	399	116
Science and scientific service...	398	169	259	103
Credit and state insurance.....	148	323	364	92
Management.....	369	231	323	109
Public organisations.....	327	157	297	131



# Education Possessed per 1000 Employees

Higher	Incomplete Higher and Secondary Specialized	Secondary General	Incomplete Secondary
--------	--	----------------------	-------------------------

## Lithuanian SSR

All sectors of the national economy  
(except for private subsidiary  
farms).....

95	175	194	247
----	-----	-----	-----

Sectors of material production

50	148	197	276
----	-----	-----	-----

Industry.....

64	164	251	286
----	-----	-----	-----

Agriculture.....

25	107	95	225
----	-----	----	-----

lumbering and woodworking.....

39	114	87	240
----	-----	----	-----

Transport.....

33	131	245	368
----	-----	-----	-----

Communications.....

38	181	316	275
----	-----	-----	-----

Construction.....

73	155	191	333
----	-----	-----	-----

Trade and public catering.....

46	216	282	254
----	-----	-----	-----

Material-technical supply

and marketing.....

81	204	255	275
----	-----	-----	-----

Procurement.....

54	177	154	284
----	-----	-----	-----

Non-production sectors.....

255	267	181	143
-----	-----	-----	-----

Housing and communal services....

39	147	212	289
----	-----	-----	-----

Health care, physical education,

and social security.....

188	360	107	141
-----	-----	-----	-----

Public education.....

366	256	128	112
-----	-----	-----	-----

Culture and art.....

212	309	247	119
-----	-----	-----	-----

Science and scientific service...

399	224	174	107
-----	-----	-----	-----

Credit and state insurance.....

82	361	354	147
----	-----	-----	-----

Management.....

256	274	285	118
-----	-----	-----	-----

Public organizations.....

354	199	230	116
-----	-----	-----	-----

# Education Possessed per 1000 Employees

	Higher	Incomplete Higher and Secondary Specialized	Secondary General	Incomplete Secondary
Moldavian SSR				
All sectors of the national economy (except for private subsidiary farms).....	77	127	256	265
Sectors of material production	35	97	267	293
Industry.....	59	146	392	257
Agriculture.....	16	47	182	311
Lumbering and woodworking.....	47	141	200	301
Transport.....	32	139	361	320
Communications.....	45	175	413	245
Construction.....	68	144	308	315
Trade and public catering.....	45	211	347	239
Material-technical supply and marketing.....	84	195	327	250
Procurement.....	36	131	250	314
Non-production sectors.....	259	257	211	143
Housing and communal services....	37	150	310	294
Health care, physical education, and social security.....	158	373	140	161
Public education.....	355	234	171	114
Culture and art.....	174	287	282	138
Science and scientific service...	435	185	183	112
Credit and state insurance.....	101	391	339	114
Management.....	284	244	293	104
Public organizations.....	315	205	241	132

# Education Possessed per 1000 Employees

Higher	Incomplete Higher and Secondary Specialized	Secondary General	Incomplete Secondary
--------	--	----------------------	-------------------------

## Latvian SSR

All sectors of the national economy (except for private subsidiary farms).....	106	194	234	261
Sectors of material production	58	172	240	297
Industry.....	67	180	279	275
Agriculture.....	32	126	115	351
Lumbering and woodworking.....	80	200	135	290
Transport.....	52	187	272	315
Communications.....	50	177	357	277
Construction.....	79	180	218	310
Trade and public catering.....	45	209	314	264
Material-technical supply and marketing.....	108	207	277	248
Procurement.....	43	168	216	320
Non-production sectors.....	255	262	216	147
Housing and communal services....	42	158	264	291
Health care, physical education, and social security.....	188	352	161	150
Public education.....	364	264	159	115
Culture and art.....	203	313	278	120
Science and scientific service...	393	197	174	131
Credit and state insurance.....	88	359	349	149
Management.....	282	265	285	105
Public organizations.....	324	195	262	133

# Education Possessed per 1000 Employees

Higher	Incomplete Higher and Secondary Specialized	Secondary General	Incomplete Secondary
--------	--	----------------------	-------------------------

## Kirghiz SSR

All sectors of the national economy (except for private subsidiary farms).....	93	144	349	218
Sectors of material production	41	113	382	245
Industry.....	54	150	389	254
Agriculture.....	20	56	391	234
Lumbering and woodworking.....	26	66	455	182
Transport.....	36	135	384	293
Communications.....	54	200	416	221
Construction.....	73	154	349	279
Trade and public catering.....	54	214	378	206
Material-technical supply and marketing.....	98	197	313	232
Procurement.....	57	186	337	228
Non-production sectors.....	270	249	237	127
Housing and communal services....	38	138	342	249
Health care, physical education, and social security.....	155	365	199	138
Public education.....	405	239	179	87
Culture and art.....	192	290	317	119
Science and scientific service...	227	160	265	177
Credit and state insurance.....	121	361	317	135
Management.....	303	246	301	95
Public organizations.....	401	188	226	115

# Education Possessed per 1000 Employees

Higher	Incomplete Higher and Secondary Specialized	Secondary General	Incomplete Secondary
--------	--	----------------------	-------------------------

## Tajik SSR

All sectors of the national economy  
(except for private subsidiary  
farms).....

83	117	329	241
----	-----	-----	-----

Sectors of material production

29	87	360	269
----	----	-----	-----

Industry.....

44	136	369	265
----	-----	-----	-----

Agriculture.....

12	34	360	278
----	----	-----	-----

Lumbering and woodworking.....

26	78	212	308
----	----	-----	-----

Transport.....

30	145	378	289
----	-----	-----	-----

Communications.....

46	179	377	251
----	-----	-----	-----

Construction.....

72	160	337	268
----	-----	-----	-----

Trade and public catering.....

54	220	376	189
----	-----	-----	-----

Material-technical supply

and marketing.....

91	179	323	225
----	-----	-----	-----

Procurement.....

47	132	352	242
----	-----	-----	-----

Non-production sectors.....

296	236	206	131
-----	-----	-----	-----

Housing and communal services....

30	125	315	263
----	-----	-----	-----

Health care, physical education,

and social security.....

166	368	160	144
-----	-----	-----	-----

Public education.....

448	209	143	88
-----	-----	-----	----

Culture and art.....

177	255	334	132
-----	-----	-----	-----

Science and scientific service...

280	209	219	176
-----	-----	-----	-----

Credit and state insurance.....

143	295	334	154
-----	-----	-----	-----

Management.....

297	222	392	111
-----	-----	-----	-----

Public organizations.....

385	183	227	105
-----	-----	-----	-----

# Education Possessed per 1000 Employees

	Higher	Incomplete Higher and Secondary Specialized	Secondary General	Incomplete Secondary
Armenian SSR				
All sectors of the national economy (except for private subsidiary firms).....	141	150	362	215
Sectors of material production	67	128	399	252
Industry.....	82	148	457	223
Agriculture.....	23	65	313	306
Lumbering and woodworking.....	38	80	267	325
Transport.....	45	138	417	291
Communications.....	56	189	477	191
Construction.....	110	140	360	262
Trade and public catering.....	75	233	430	175
Material-technical supply and marketing.....	171	231	389	140
Procurement.....	97	194	393	187
Non-production sectors.....	361	217	252	104
Housing and communal services....	59	135	395	257
Health care, physical education, and social security.....	223	351	217	121
Public education.....	491	198	182	74
Culture and art.....	256	246	348	96
Science and scientific service...	488	147	244	82
Credit and state insurance.....	122	387	411	59
Management.....	366	209	310	79
Public organizations.....	415	141	295	99



# Education Possessed per 1000 Employees

Higher	Incomplete Higher and Secondary Specialized	Secondary General	Incomplete Secondary
--------	--	----------------------	-------------------------

## Turkmen SSR

All sectors of the national economy  
(except for private subsidiary  
farms).....

87	130	354	252
----	-----	-----	-----

Sectors of material production

33	96	392	283
----	----	-----	-----

Industry.....

41	138	360	282
----	-----	-----	-----

Agriculture.....

15	38	432	283
----	----	-----	-----

Lumbering and woodworking.....

46	123	301	297
----	-----	-----	-----

Transport.....

38	176	335	291
----	-----	-----	-----

Communications.....

48	208	370	262
----	-----	-----	-----

Construction.....

67	143	348	303
----	-----	-----	-----

Trade and public catering.....

49	197	366	234
----	-----	-----	-----

Material-technical supply

71	178	344	261
----	-----	-----	-----

and marketing.....

74	150	314	239
----	-----	-----	-----

Procurement.....

Non-production sectors.....

273	246	223	148
-----	-----	-----	-----

Housing and communal services....

37	129	310	279
----	-----	-----	-----

Health care, physical education,  
and social security.....

168	367	172	158
-----	-----	-----	-----

Public education.....

403	213	180	116
-----	-----	-----	-----

Culture and art.....

146	264	360	143
-----	-----	-----	-----

Science and scientific service...

236	206	249	189
-----	-----	-----	-----

Credit and state insurance.....

151	306	318	152
-----	-----	-----	-----

Management.....

306	258	253	117
-----	-----	-----	-----

Public organizations.....

381	174	232	121
-----	-----	-----	-----

# Education Possessed per 1000 Employees

	Higher	Incomplete Higher and Secondary Specialized	Secondary General	Incomplete Secondary
Estonian SSR				
All sectors of the national economy (except for private subsidiary farms).....	108	186	229	263
Sectors of material production	61	164	234	301
Industry.....	63	171	262	290
Agriculture.....	52	143	112	330
Lumbering and woodworking.....	59	138	124	303
Transport.....	45	165	263	326
Communications.....	51	190	304	278
Construction.....	84	157	237	303
Trade and public catering.....	40	176	310	289
Material-technical supply and marketing.....	82	236	285	245
Procurement.....	57	174	298	225
Non-production sectors.....	258	259	214	141
Housing and communal services....	34	153	265	270
Health care, physical education, and social security.....	194	339	151	141
Public education.....	340	267	170	118
Culture and art.....	262	256	257	119
Science and scientific service...	487	188	185	81
Credit and state insurance.....	111	323	326	164
Management.....	281	268	261	118
Public organizations.....	338	235	266	88

# People's Universities in the USSR

## 1. Distribution of people's universities by year of organization (in thousands)

Including those organized

	<u>Total</u>	<u>1965 and earlier</u>	<u>1966- 1970</u>	<u>1971- 1975</u>	<u>1976-1980 (prior to 1 June)</u>
Urban-type settlements and rural localities					
Number of universities.....	47.5	2.8	7.8	12.8	24.1
Student enrollment.....	13,838	1,509	2,791	3,835	5,703
Urban-type settlements					
Number of universities.....	34.8	2.4	6.0	9.3	17.1
Student enrollment.....	11,551	1,414	2,400	3,108	4,629
Rural localities					
Number of universities.....	12.7	0.4	1.8	3.5	7.0
Student enrollment.....	2,287	95	391	727	1,074

2. Grouping of people's universities by branches of knowledge (disciplines) as of 1 June 1980

		Urban-type settlements and rural localities		Urban settlements		Rural localities	
		Number of universi- ties	Student enroll- ment	Number of universi- ties	Student enroll- ment	Number of universi- ties	Student enroll- ment
All people's universities . . .		47,537	13,838	34,869	11,551	12,665	2,287
Among them universities in the following disciplines:							
Pedagogy (teacher training) . . .		13,965	5,865	7,832	4,659	6,133	1,206
Culture . . . . .		6,311	1,309	4,867	1,125	1,444	184
Sociopolitical sciences . . .		5,454	1,098	4,328	929	1,126	169
Medicine . . . . .		5,167	1,167	4,273	1,036	894	131
Law . . . . .		4,643	1,224	3,824	1,074	819	150
Agriculture . . . . .		2,589	668	1,453	422	1,136	246
Science, technology and advanced research . . . . .		2,478	600	2,437	596	41	4
Economics, production organization and management . . . . .		2,119	403	1,905	379	214	24
General . . . . .		1,837	896	1,405	784	432	112
Natural sciences . . . . .		718	131	618	119	100	12
Soviet trade . . . . .		516	51	489	49	27	2
Public-type occupations . . .		439	144	406	138	33	6
Lecturing skills . . . . .		242	30	221	29	21	1
Physical education and sports .		215	42	191	39	24	3
Others . . . . .		841	-	620	173	221	37

### 3. Social composition of students at people's universities as of 1 June 1980

	Urban-type settlements and rural localities	Urban-type settlements	Including Rural localities
Total number of students at people's universities--in thou- sands	13,838	11,551	2,287
Including:			
Workers.....	5,934	5,069	865
% of total.....	43	44	38
kolkhoz members .....	1,845	1,126	719
% of total.....	13	10	31
Office employees.....	6,099	5,356	703
% of total.....	44	46	31

### 4. Grouping of people's universities by number of graduates as of 1 June 1980

(in thousands)

	Urban-type settlements and rural localities	Urban-type settlements	Including Rural localities
Number of universities graduating students .....	39.6	29.8	9.8
Students graduated by them .....	41,831	37,216	4,615
Of the total number, universities carrying out:			
1- 3 graduations			
Number of universities .....	21.9	15.7	6.2
Students graduated by them..	7,617	6,199	1,418
4- 5 graduations			
Number of universities.....	10.1	7.7	2.4
Students graduated by them..	11,779	10,130	1,649
7- 9 graduations			

Number of universities .....	3.7	3.0	0.7
Students graduated by them..	6,713	6,041	672
10 or more graduations			
Number of universities .....	3.9	3.4	0.5
Students graduated by them..	15,722	14,846	876

5. People's universities throughout the Union Republics  
(Based on simultaneous data; in thousands)

	1969		1973		1980	
	Number of universities	Student enrollment	Number of universities	Student enrollment	Number of universities	Student enrollment
USSR	15.8	3,218	28.8	6,870	47.5	13,838
RSFSR	7.3	1,626	14.1	3,581	23.8	7,049
Ukrainian SSR	3.4	662	5.9	1,386	9.7	2,425
Belorussian SSR	1.2	166	1.8	351	2.7	922
Uzbek SSR	0.8	73	1.5	160	2.4	303
Kazakh SSR	1.1	188	2.1	383	3.5	667
Georgian SSR	0.3	27	0.4	60	0.7	108
Azerbaijan SSR	0.2	26	0.5	77	0.7	124
Lithuanian SSR	0.1	129	0.1	220	0.3	682
Moldavian SSR	0.3	73	0.4	135	0.4	362
Latvian SSR	0.1	93	0.1	154	0.5	289
Kirghiz SSR	0.2	43	0.4	100	0.6	191
Tajik SSR	0.3	22	0.7	72	1.2	135
Armenian SSR	0.3	34	0.4	50	0.4	215
Turkmen SSR	0.1	13	0.2	24	0.3	72
Estonian SSR	0.1	43	0.2	117	0.3	294

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# EDUCATION

## EDUCATIONAL LEVELS OF WORKERS IN 1970, 1979 COMPARED

ROSSISKIY VEŠENIK STATISTIKI in Russian No 5, May 81 pp 64-66

[Text] Level of Education of Population of the USSR and Union Republics Engaged in Physical and Mental Labor in 1970 and 1979

Per 1000 persons of the entire employed population possessing the following education

	Higher, incomplete higher, and specialized	Secondary general	Incomplete secondary
<b>USSR</b>			
1970.....	183	159	311
1979.....	267	276	262
<b>Russian SSR</b>			
1970.....	189	141	326
1979.....	277	243	283
<b>Ukrainian SSR</b>			
1970.....	175	191	302
1979.....	260	312	241
<b>Belorussian SSR</b>			
1970.....	167	154	273
1979.....	256	284	223
<b>Uzbek SSR</b>			
1970.....	155	213	295
1979.....	229	413	206
<b>Tatarstan SSR</b>			
1970.....	175	155	324
1979.....	258	289	260
<b>Central Asia</b>			
1970.....	237	270	204
1979.....	306	380	170

## Continuation

Azerbaijan SSR			
1970 .....	204	208	262
1979 .....	248	360	224
Lithuanian SSR			
1970 .....	160	98	238
1979 .....	270	194	247
Moldavian SSR			
1970 .....	123	104	281
1979 .....	204	256	265
Latvian SSR			
1970 .....	210	147	304
1979 .....	300	234	261
Kirghiz SSR			
1970 .....	168	175	300
1979 .....	237	349	218
Tajik SSR			
1970 .....	140	164	298
1979 .....	200	329	241
Armenian SSR			
1970 .....	203	253	241
1979 .....	291	362	215
Turkmen SSR			
1970 .....	158	176	348
1979 .....	217	394	252
Georgian SSR			
1970 .....	203	153	304
1979 .....	294	229	263

## Continuation

Per 1000 persons engaged primarily in  
physical labor possessing the follow-  
ing education

	Higher, incomplete higher, and secondary specialized	Secondary general	Incomplete secondary
<b>USSR</b>			
1970 .....	31	145	367
1979 .....	77	315	340
<b>RSFSR</b>			
1970 .....	30	126	383
1979 .....	79	274	371
<b>Ukrainian SSR</b>			
1970 .....	33	181	360
1979 .....	80	354	314
<b>Belorussian SSR</b>			
1970 .....	23	137	314
1979 .....	64	323	290
<b>Uzbek SSR</b>			
1970 .....	29	206	344
1979 .....	68	480	256
<b>Kazakh SSR</b>			
1970 .....	29	135	380
1979 .....	73	323	338
<b>Georgian SSR</b>			
1970 .....	96	273	271
1979 .....	102	458	236
<b>Azerbaijan SSR</b>			
1970 .....	39	198	327
1979 .....	77	413	287
<b>Lithuanian SSR</b>			
1970 .....	21	62	264
1979 .....	71	200	324
<b>Latvian SSR</b>			
1970 .....	16	81	314
1979 .....	49	275	326

## Continuation

Latvian SSR			
1970 .....	55	120	368
1979 .....	110	246	350
Kirghiz SSR			
1970 .....	29	162	348
1979 .....	68	402	273
Tajik SSR			
1970 .....	23	149	338
1979 .....	52	370	290
Armenian SSR			
1970 .....	39	228	317
1979 .....	91	425	297
Turkmen SSR			
1970 .....	29	166	406
1979 .....	99	406	309
Estonian SSR			
1970 .....	51	120	371
1979 .....	103	236	354

## Continuation

Per 1000 persons engaged primarily in  
mental labor possessing the following  
education

	Higher, incomplete higher, and secondary specialized	Secondary general	Incomplete secondary
USSR			
1970.....	602	191	160
1979.....	720	186	75
RSFSR			
1970.....	594	174	182
1979.....	714	175	90
Ukrainian SSR			
1970.....	631	216	119
1979.....	738	200	48
Belorussian SSR			
1970.....	625	200	138
1979.....	755	183	49
Uzbek SSR			
1970.....	578	234	132
1979.....	720	211	53
Kazakh SSR			
1970.....	554	206	184
1979.....	685	210	81
Georgian SSR			
1970.....	688	245	46
1979.....	769	204	20
Azerbaijan SSR			
1970.....	640	228	95
1979.....	729	210	46
Lithuanian SSR			
1970.....	797	200	151
1979.....	742	179	63
Moldavian SSR			
1970.....	624	201	133
1979.....	733	193	56
Latvian SSR			
1970.....	590	208	155
1979.....	696	212	74

## Continuation

Kirghiz SSR			
1970.....	611	201	145
1979.....	726	196	59
Tajik SSR			
1970.....	570	215	157
1979.....	735	181	64
Armenian SSR			
1970.....	608	295	66
1979.....	747	218	28
Turkmen SSR			
1970.....	577	199	167
1979.....	712	191	75
Estonian SSR			
1970.....	559	221	154
1979.....	678	216	79



Level of Education of the Population of the USSR Engaged in Physical and Mental Labor by Individual Occupations in 1970 and 1979\*

Per 1000 persons in a given occupation, possessing the following education			
1970			
	Higher, incom- plete higher, and secondary specialized	Secondary general	Incomplete secondary
entire employed population.....	183	159	311
Employed primarily in physical labor.....	31	145	367
employed in power plants.....	43	128	339
Miners.....	43	145	404
Metallurgists and foundry workers.	55	190	406
Employees in machine building and metalworking.....	57	254	431
Chemical workers.....	83	270	388
Employees engaged in producing building materials, concrete and reinforced concrete, glass, and porcelain items.....	26	154	402
employees in lumbering forest con- servation and growing.....	18	56	291
Wood-processing workers.....	21	126	384
Paper and cardboard workers.....	42	173	389
Printers.....	63	298	448
Textile workers.....	31	209	440
Garment workers.....	37	236	460
Leather workers and fur workers..	27	157	391
Shoemakers.....	23	181	412
Food-industry workers.....	32	149	386
Builders.....	20	116	405
Agricultural laborers.....	7	61	279
Employees in fishing, . . . -farming, and hunting.....	22	59	238
Railroad workers.....	54	144	397

		Continuation	
Water-transport workers.....	69	203	456
Employees in automotive transport and municipal electric transport..	19	153	511
Communications workers .....	57	265	459
Operators of hoisting and trans- port machinery.....	27	181	446
Workers in trade and public catering .....	84	227	451
Workers in communal, business, and everyday services.....	12	56	239
Motion-picture technicians.....	58	263	555
Hospital workers, nurses, and nursemaids .....	13	88	335
Operators of business machines....	179	571	249
Laboratory workers and workers on geological surveying and other surveying operations.....	129	471	310
Checkers, inspectors, graders.....	90	324	400
Warehouse workers, weigh masters, receivers, distributors.....	56	201	482

## Continuation

Per 1000 persons in a given occupation,  
possessing the following education

	1979		
	Higher, incom- plete higher, and secondary specialized	Secondary general	Incomplete secondary
Entire employed population.....	267	276	262
Employed primarily in physical labor.....	77	315	340
Employed in power plants.....	88	220	345
Miners .....	118	312	348
Metallurgists and foundry workers	128	344	340
Employees in machine building and metalworking .....	126	406	322
Chemical workers.....	153	409	295
Employees engaged in producing building materials, concrete and reinforced concrete, glass, and porcelain items.....	71	325	365
Employees in lumbering, forest conservation and growing .....	49	155	363
Wood-processing workers .....	56	273	374
Paper and cardboard workers ....	95	308	356
Printers .....	129	453	310
Textile workers .....	61	404	353
Garment workers .....	75	458	329
Leather workers and fur workers	71	347	350
Shoemakers .....	53	366	361
Food-industry workers.....	80	321	348
Builders .....	61	292	385
Agricultural laborers.....	22	215	330
Employees in fishing, fish-farming, and hunting.....	63	177	320

## Continuation

Railroad workers.....	118	292	350
Water-transport workers.....	167	371	318
Employees in automotive transport and municipal electric transport....	54	376	417
Communications workers.....	103	431	332
Operators of hoisting and transport machinery .....	72	349	381
Workers in trade and public catering.....	158	396	319
Workers in communal, business, and everyday services.....	38	168	309
Motion-picture technicians.....	119	414	382
Hospital workers, nurses, and nursemaids.....	46	262	359
Operators of business machines.....	204	656	122
Laboratory workers and workers on geological surveying and other surveying operations.....	236	545	175
Checkers, inspectors, graders.....	172	449	271
Warehouse workers, weigh masters, receivers, distributors.....	116	344	380

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\* In these census lists what was taken into account was the position or the actual work being carried out rather than the specialization by education.

## Continuation

Per 1000 persons in a given occupation,  
possessing the following education

	1970		
	Higher, incom- plete higher, and secondary specialized	Secondary general	Incomplete secondary
Employees engaged primarily in mental labor .....	602	191	160
Managers of state administra- tive organs and their struc- tural sub-divisions .....	598	207	164
Managers and instructors of public organizations and their structural sub-divisions..	685	216	82
Managers of enterprises (in in- dustry, construction, agriculture and lumbering, transport and com- munications) and their structural sub-divisions .....	697	112	131
Engineers and technicians .....	683	168	117
Agronomists, animal specialists, veterinarians, and foresters.....	809	54	88
Medical workers .....	827	90	64
Scientific workers, teachers, educators .....	835	120	36
Workers in literature and the press .....	740	216	37
Cultural-educational workers ....	506	344	127
Workers in the arts .....	514	287	162
Juridical personnel .....	861	93	39
Employees in trade, public cater- ing, procurement, supply, and marketing .....	354	215	313
Employees in planning and accounting .....	356	294	303
Office workers and business pro- duction personnel.....	161	477	325

## Continuation

Workers in communal enterprises and everyday services .....	241	221	361
Chiefs of administrative-business boards and divisions, managing the economy .....	124	199	432
Agents and expeditors .....	162	267	410



## Continuation

Per 1000 persons in a given occupation,  
possessing the following education

		1979		
		Higher, incom- plete higher, and secondary specialized	Secondary general	Incomplete secondary
Employees engaged primarily in mental labor .....	720		186	75
Managers of state administrative organs and their structural sub-divisions.....	778		169	46
Managers and instructors of public organizations and their structural sub-divisions ..	793		164	35
Managers of enterprises (in in- dustry, construction, agricul- ture and lumbering, transport and communications) and their structural sub-divisions.....	816		96	64
Engineers and technicians.....	797		138	51
Agronomists, animal specialists veterinarians, and foresters.....	887		52	42
Medical workers.....	876		86	29
Scientific workers, teachers, educators.....	884		95	17
Workers in literature and the press.....	819		159	20
Cultural-educational workers.....	636		297	58
Workers in the arts.....	632		287	69
Juridical personnel.....	904		80	13
Employees in trade, public cater- ing, procurement, supply, and marketing.....	527		239	181
Employees in planning and accounting.....	530		304	141
Office workers and business pro- duction personnel.....	271		559	151

## Continuation

Workers in communal enterprises and everyday services .....	370	282	242
Chiefs of administrative-business boards and divisions, managing the economy .....	243	320	315
Agents and expeditors .....	328	354	256

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